

The DX Bulletin

• America's Oldest Weekly Amateur Radio Publication •

ISSUE 301 AUGUST 30, 1985

PROPAGATION: Aug 30- Sept 2, High Normal; Sept 3, Above Normal; Sept 4-7, High Normal; Sept 8, Below Normal; Sept. 9, Disturbed. TNX N4XX.

Flux (80)	Flux (81)	Flux (82)	Flux (83)	Flux (84)	Date	Flux -----1985-----	A	K
191	219	158	129	81	8/16	67	10	2
200	223	161	129	81	8/17	66	11	3
211	n/a	164	124	79	8/18	67	12	4
197	n/a	156	119	77	8/19	68	15	3
189	n/a	141	115	74	8/20	69	12	3
190	261	136	116	74	8/21	69	11	2
177	259	136	112	76	8/22	71	17	3

The theoretical solar flux minimum possible is 65 and we are almost there ... there is speculation among experts that this cycle could be a short one, perhaps 10 years. We are currently in the 9th year.

• REMINDER: In order to update your DXCC total for the Annual List in QST (usually in the December issue) you must submit your endorsement application before September 30.

• HC8E was by members of the Quito Radio Club and QSLs should be sent to the Club's address. An operation for the CQ WW Phone Contest the last weekend of October is firming up, with all operator slots now filled. They plan to concentrate on the low bands, especially 160 Meters, both before and after the Contest.

• Pat, N0Z0, has left 9G1 Ghana; there was no chance of getting operating permission there. He will be in the States for a while, then in Bogota, Columbia, and then stationed in Tanzania.

• Jim Smith, VK9NS, says the Heard Island ship leaves Hobart Australia Sept 16, arrival on Heard estimated for Sept 29; Jim and Kirsti are still awaiting word on whether they will be on the ship.

• From the DX News Sheet (RSCB): SM7DZZ is quoted as saying he would never operate from Mozambique without permission as it could jeopardize his job. On Aug 11 he telephoned his wife (in Sweden), said he'd be on 20 Meters, and SM7DZZ/C9 appeared on 20 CW shortly thereafter. Then AB4Y reportedly appeared, and C9MDB has also been on (according to DXNS).

• VK9XJ writes from Christmas Island to say that there are five operators there: VK9s XA, XW, XD, XZ and XJ; only the latter two are active. VK9XI is a club station call. Neither XZ nor XJ make schedules because their work commitments make it difficult for them to meet such schedules. VK9XJ says best spot for him is 14.170 Mon-Fri at 1200Z.

• Japan and the U.S. have signed a reciprocal operating agreement, according to the ARRL. It takes effect Sept. 7. More details will be forthcoming.

• Highlight of the All Asia CW contest last weekend was HSOA with a big signal. This is believed to be a joint Japanese-Thai effort, in keeping with the government's stated policy of re-opening amateur radio by allowing operations by selected groups on contest weekends. The recent HS0IYY operation was a warm-up; JA8ATG is QSL manager.

• The annual New England DXCC dinner will be held in October (instead of November) this year...Oct. 12 to be specific, at the same location as past years, in W. Concord Mass. Both afternoon and evening programs are shaping up, to include Kingman Reef, Clipperton, videotapes, and the usual DX Countdown and DX quiz. Flyers will be mailed soon to all known members and others; contact K1VHS if you haven't received your flyer by mid-September.

• Canadian award announced: The National Parks 100 Award is available for working (for U.S. and other non-Canadians) 100 points worth of VEs, as follows: regular stations, 2 points, special prefix stations, 10 points, and stations operating from Parks Canada sites, 20 points. Log copy certified by two other amateurs to VE3XN with a donation of \$1 or 3 ircs.

• DXNS says VS6CT reports XU1SS operator Kimsan is on the air with a dipole antenna, but we have seen no reports.

• A copy of S92LB's license has been mailed from Portugal to ARRL Headquarters, for DXCC purposes.

• ZL9AA is on Auckland Island for about two months; he is limited to 160, 80 and Meters. Similarly, ZL7AA on Chatham is reportedly allowed only 80 and 10 Meters.

• Eastern Europeans and western USSR stations are already being heard on 160 Meters along the East Coast of the U.S. Last season was the best ever on 160, according to those in the know, and this season is already shaping up to be as good or perhaps better. TDXB plans to concentrate even more on 160, 80, and 40 this year than last.

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THE COMPUTERIZED 'DX EDGE'

by Dave Jaksa, WOVX*

The computerized version of the original 'DX Edge' preserves all the features of the original and adds several desirable enhancements. The purpose of either DX Edge is to display the position and shape of the terminator (sunrise/sunset transition line) for any time of any day of the year. This provides key propagation information as to where the Gray Line path is and which parts of the world are experiencing daylight and which are in darkness.

The original DX Edge operates much like a slide rule, with the operator moving the slide as time progresses, to move the terminator. The C-64 computer version also displays the terminator, on a Mercator projection of the Earth, using high resolution graphics to show latitude and longitude coordinates, time of day, date, and lat/long of marked points.

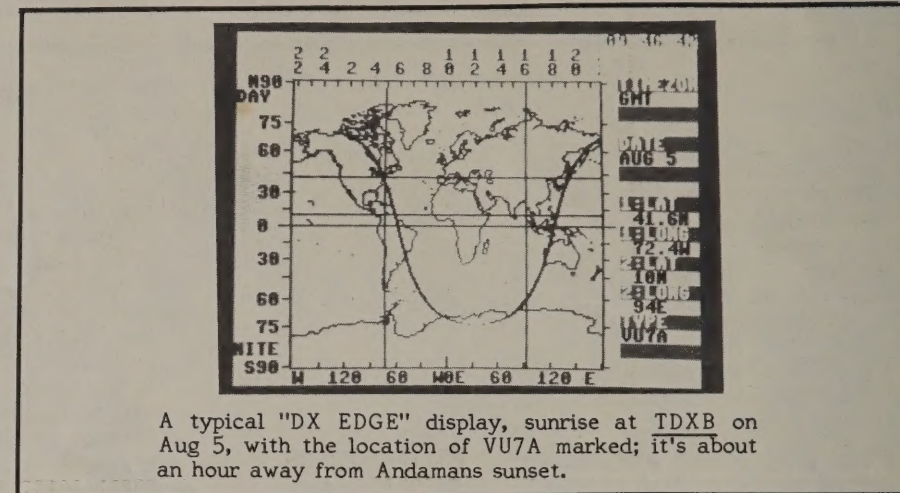
The display automatically updates as the earth rotates, i.e., as time progresses, always showing the correct position of the terminator. The program will also calculate sunrise and sunset times for any location and will mark the location(s) on the map display, if desired.

Initial loading of the program and drawing of the map takes about two minutes, due to the slowness of the C-64 disk drive system. Selecting display color and setting the time and date take another 2 minutes or so.

Once the initial parameters are set, the following main menu choices are displayed:

- 1 RETURN TO THE DISPLAY
- 2 ROTATE THE EARTH
- 3 MARK HOME LOCATION
- 4 SELECT GRAY LINE CURVE
- 5 SHIFT CURVE POSITION
- 6 MARK DX LOCATION
- 7 SOLVE SUNRISE/SET TIME
- A SET CLOCK
- B SET COLOR
- X EXIT DX EDGE

"ROTATE THE EARTH" enables the user to center the Mercator projection of the Earth on any longitude. The initial display is centered on the prime meridian (0 Long.), with the date line (180 Long.) at the edges. This command could be used to "rotate the Earth" by 90 degrees to center the display on North America; this option is especially important if your location is near 180 degrees longitude, as it will provide a more useful display.



A typical "DX EDGE" display, sunrise at TDXB on Aug 5, with the location of VU7A marked; it's about an hour away from Andamans sunset.

When the "SELECT GRAY LINE CURVE" is chosen, the user is asked to input the month and date of interest. There are 24 curves stored on the disk, one for the 1st and 15th of each month.

Once the day of the year is selected, the following curve position options become available:

- A Current time
- B Current time with auto shift
- C Sunrise at home location
- D Sunset at home location
- E Sunrise at DX location
- F Sunset at DX location.

For general use, Option B is suggested, as it will update the terminator position automatically every 14 minutes, providing a nearly real-time display as the contest or DX session progresses. Date changes, however, are not automatic.

Options C, D, E, and F are especially useful for low band work in predicting propagation enhancements caused by local or DX sunrise or sunset. These options will show the curve and position and provide the time of the phenomena selected.

"SHIFT CURVE POSITION" permits moving the curve forward or backward in time. It also permits access to the A-F options of "SELECT GRAY LINE CURVE" without having to input the date and wait for a disk search again.

"MARK DX LOCATION" is similar to marking the home location. The big difference is that you can input locations by using the standard callsign prefix, or country name, or lat/long. This is a super feature, in that it saves having to go to the world atlas to look up lat/long information. We used this feature to demonstrate that on August 5 there was a 3-hour long daylight path

between The DX Bulletin and the Andaman Islands, starting at about 0930Z. If only someone were there on VU7...

The "MARK HOME LOCATION" option permits the user to mark the longitude and latitude of his QTH on the map.

Finally, the "SOLVE SUNRISE/SET TIME" option provides the requested information for any location. Again, the location may be specified by call prefix, country name, or lat/long data.

The computerized DX Edge is elaborate, yet easy to use. The first day of use was spent "looking at" the various months' curves and solving sunrise/sunset times for the 12 countries I still need. The automatic updating feature gives one a better understanding of why come of the propagation "windows" are so short. This could be a real plus while searching for multimpilers in a DX contest.

The program is completely self-prompting, with no noted operational ambiguities. A quick pass through the 12-page instruction booklet is all that is required to become reasonably proficient at using the program. All improper entries are ignored, with the display returning to the menu. None of the intentional wrong keystrokes I tried would make the software lock up.

Editor's note: The computerized DX Edge requires a Commodore 64 with disk drive, costing approximately \$400 for both. The manufacturer, Xantek Inc., advises that there are currently no plans to offer the software for computers other than the C-64.

*Dave Jaksa is an engineer/manager for Rockwell International in Cedar Rapids, Iowa.

KEY TO BANDPASS:
 Callsign;
 Frequency;
 UTC;
 day of month;
 state.

PLEASE WRITE OR
 PHONE TO REQUEST
 REPORT FORMS AND
 ENVELOPES; mail
 them to TDXB
 anytime, or phone:

203-742-7124

(24 hours).

OK3YX 7003 0305 15 OR
 PZ1DV 7004 1008 19 MA
 TG9FC 7012 0135 17 FL
 UA0DA 7006 1345 19 OR
 (OBL 111)
 UA9SHP 7009 0122 17 FL
 V2ACW 7003 0036 17 MA
 V85TT 7004 1355 16 OR
 VK2BKD/2 7004 1400 20 OR
 (LORD HOWE)
 VK9NL 7001 1145 13 OR
 VS6DO 7003 1140 13 OR
 YB0AV 7007 1410 19 OR
 YB4FN 7004 1330 16 OR
 ZS5FY 7006 1435 15 OR
 ZS5LB 7006 1420 19 OR

20 METERS

4X6KF 14226 0020 11 PA
 5B250A 14166 2226 19 CT
 (CYPRUS)
 5B4/YU1FW 14219 2158 10 MD
 5N1/N5CJB 14209 2305 17 MN
 5N3/W4HHB 14211 2245 17 OR
 5W1DZ 14309 0337 21 PA
 5W1DZ 14309 0310 10 PA
 5X5GK 14186 2005 16 MN
 5Z4DU 14183 2017 16 MN
 5Z4DU 14185 2045 16 CT
 7X2LS 14184 0135 19 MN
 7X5AV 14207 1020 15 VA
 9M2RT 14180 1440 10 PA
 9M8EN 14201 1140 21 OR
 A71AD 14169 1725 18 OR
 AH8A 14170 0530 17 PA
 BV2B 14219 1230 10 PA
 BY1SK 14030 0028 20 OR
 C31LBB 14020 2306 18 FL
 C53EK 14171 2040 17 PA
 CE0ERY 14193 0300 13 PA
 CG9ASJ 14021 1530 18 OR
 (ST PAUL)

CP8HD 14215 0300 16 OR
 CY0SAB 14185 1659 13 MD
 CY0SAB 14185 1730 13 PA
 EA8/DK7AE 14214 2250 17 OR
 EA8ADP 14190 0025 18 MN
 EA8BIL 14039 2250 18 FL
 EA8ZO 14199 2026 16 MN
 EA8ZO 14202 2314 12 PA
 EA9IE 14221 0022 18 MN
 EA9JE 14020 0025 20 OR
 EA9MM 14236 0147 19 MN
 FG0/F6HQI 14048 1156 17 FL
 FK8FE 14044 0441 16 MN
 FK8FL 14271 0327 19 MN
 FO8FO 14026 1440 21 OR
 FO8FO 14024 0504 17 PA
 FO8FO 14025 0450 17 MA
 FO8JB 14309 0353 17 PA
 FO8KW 14174 0400 20 PA
 FO8KW 14177 0430 11 PA
 FO8KW 14177 0345 10 PA
 FO8NA 14309 0245 15 PA
 FY5YE 14003 0324 21 PA
 GD5FG 14004 1455 21 OR
 GWOAVZ 14186 2209 20 CT
 H44IA 14025 0400 18 PA
 HC8E 14192 0145 19 MA
 HC8E 14195 1600 18 PA
 HC8E 14202 2125 18 OR

HL1AQ 14203 1223 10 MD
 HL2AMR 14190 1222 11 PA
 HL9TW 14185 1244 11 PA
 HP1XKR 14024 0135 16 MI
 HSOA 14218 1400 18 PA
 HSOA 14218 1430 18 MN
 HSOIYY 14225 1020 18 VA
 J28CI 14015 2053 17 FL
 J37AJ 14013 2355 18 OR
 J5WAD 14170 2040 16 CT
 J5WAD 14200 2030 17 PA
 J73AU 14222 1245 18 PA
 J73CC 14224 0213 19 OR
 J88AQ 14225 1105 17 VA
 JY5CI 14193 2131 17 MA
 JY8GW 14175 2113 22 CT
 OX/WA2UUK 14215 0020 18 MN
 PJ2HB 14227 2205 18 OR
 PZ1DT 14020 0240 19 MN
 S92LB 14183 2110 20 PA
 S92LB 14183 2110 22 CT
 S92LB 14182 2145 13 TX
 SV0DH/5 14166 2010 16 CT
 SV0DH/5 14187 2245 11 PA
 (RHODES)
 SV1PL 14191 2138 17 MA
 T32AB 14193 1736 18 CT
 T32AB 14193 1725 18 OR
 T32AB 14217 0337 17 PA
 T77C 14024 0035 20 OR
 TA1E 14227 2125 10 MD
 TK/DF4VS 14025 1730 12 PA
 TK5IU 14016 2054 17 FL
 TR8DR 14217 2210 17 OR
 TR8DR 14225 2025 16 VA
 TR8JLD 14190 0033 15 MD
 TR8RAL 14146 1848 17 PA
 TU/K1CTK 14182 1600 17 PA
 TZ6FE 14157 2255 16 MN
 TZ6FE 14157 2240 16 CT

UD6DKW 14024 2034 17 FL
 UF6GEO 14028 1949 12 MI
 UH8EWW 14179 0315 12 PA
 UL7CK 14004 1202 17 FL
 UL7EDL 14065 1228 19 PA
 UL7GM 14004 0319 12 PA
 UL7JCO 14018 0225 15 OR
 UL8GWJ 14021 1345 18 PA
 UL8LWA 14215 1237 19 PA
 UL8LWZ 14187 1045 18 VA
 UZ2FWA 14020 1238 17 FL
 V44KT 14206 0055 19 OR
 VE8HL 14062 0106 16 FL
 VK0GC 14175 0204 10 MD
 (MACQUARIE)
 VK2BCH 14181 0300 13 PA
 VK2BCI (LORD HOWE)
 VK9NS 14028 0350 17 PA
 VK9NS 14027 0340 19 PA
 VK9NS 14029 0343 17 MA
 VK9NS 14028 0322 19 MN
 VK9NS 14031 0400 16 MN
 VP2MDX 14180 0205 20 OR
 VP5EE 14171 1902 18 CT
 VP5EE 14210 2128 18 OR
 VS6CT 14162 1525 10 MD
 YB2BGZ 14201 1155 21 OR
 YB4FW 14223 1405 18 PA
 YB8AX 14025 1224 19 PA
 YJ8RG 14309 0234 11 PA
 YN1CC 14022 2123 20 PA
 ZC4MR 14227 2133 10 MD
 ZD7BJ 14170 2035 16 CT
 ZD7CW 14182 1630 17 PA
 ZF2BN 14031 2120 20 PA
 ZK1RE 14309 0320 18 PA
 ZK1RE 14309 0318 18 MN
 (SOUTH COOKS)

160 METERS

EA3VY 1834 0405 9 MA
 VK2BCH 1832 1055 13 AL
 VK7BC 1832 1057 13 AL

80 METERS

C21RK 3799 1130 17 CA
 CY0SAB 3790 2300 13 MA
 EA9/YU3PR 3797 0129 23 MA
 H44IA 3793 1113 13 AL
 HC8E 3793 1024 21 MA
 HP3FL 3795 1042 19 MN
 HR1/WB5YWU 3798 0120 17 MA
 HR6/N2EUN 3795 0300 18 MA
 J6LKZ 3797 0405 9 CT
 J6LPT 3796 0255 18 MA
 KC6IN 3799 1135 17 CA
 (EAST CAROLS)
 PZ1DV 3796 0255 18 MA
 TI8ZWW 3798 0120 17 MA
 VK9ZB 3798 1222 17 CA
 VK9ZB 3798 1318 19 CA
 VK9ZB 3798 1100 12 MI
 VK9ZB 3798 1124 13 AL
 YB0JH 3795 1315 16 CA
 YC2BYZ 3794 1345 20 OR
 ZL7AA 3794 1050 15 MI
 (CHATHAM)
 ZL9AA 3798 1325 13 CA

40 METERS

9M2RT 7008 1320 20 OR
 CE0ZIQ 7012 0515 15 OR
 DU7/N7ET 7007 1325 21 OR
 DU7/N7ET 7006 1440 16 OR
 DU7GJ 7004 1405 21 OR
 DU7GJ 7009 1440 20 OR
 FK8BG 7003 1130 15 MA
 FK8FG 7003 1130 15 AL
 H44IA 7007 1140 13 OR
 HC5NAI 7009 1145 20 OR
 HC5NAL 7007 0129 17 FL
 HC8E 7004 0156 19 MA
 HP1XKR 7005 0217 16 MI
 KH6CF 7002 1144 17 FL
 OA4BJU 7016 0430 14 MA

Five years ago in The DX Bulletin

(September 2, 1980): 17 operators were signing HKOAB from Bajo Nuevo, the plan being to sail to Serrana Bank next for HKOAA...N6ZV, AA6AA and KA6S were in the Indian Ocean area, where they made 10,000 contacts as 3B9ZV and 3B8ZV...we noted that September, 1980 QST listed 144 DXers having all 319 countries on the mixed Honor Roll...K6LPL, DJ9ZB, and J28AZ were working on a December Abu Ail show, VK9ZG was on from Willis, and there were several stations on from A6, with no paperwork to present in Newington. QSLs were arriving from the October, 1979, UOY Zone 23 operation. It turned out that if you didn't work them on 10 Meters, your hopes for the 5-Band Worked All Zones Award (from CQ magazine) were dashed for years to come, because although propagation on 28 MHz remained strong for several more years, there were simply no Zone 23 stations on the band.

CALENDAR

ISSUE 301

LORD HOWE
COMOROS
HEARD ISLAND
GALAPAGOS

By VK2BCH ended Aug 28
D68JF no reports in North America
Jim Smith waiting for Sept operation
HC8E by Quito radio club has come and
gone; W8KKF group ready
for end of October

MAURITANIA

5T5SL (9X5SL) reported in EU 14.277
at 1700

GUINEA-BISSAU
CHRISTMAS
COCOS-KEELING

J5WAD in Bandpass again
VK9XJ info Issue 301
VK9XJ says no current operators

WALLIS
MALI
E KIRIBATI
KERGUELEN
SAO TOME

FW8AF there, need reports
TZ6FS, WC new stations; I298
T32AB is back
FT8XB likes 20 SSB 0400-0600
S92LB on 14.183 2030-2330Z4

NORTH COOKS
CHINA
KURE
WILLIS
PITCAIRN

ZK1WL by ZL3AFH may stay until Dec
Active stations run-down I294
KH6JEB/KH7 on again, off again
VK9ZB on P29JS 14.220 net at 0700Z
VR6JR on through Sept, mostly 20

WAKE
MADEIRA
ST PIERRE

AH9AC on now;
DJ2BW/CT3 Sept 1-15
FP/W3ESU (CW) and FP/K8CFU (SSB) Sep
11-15, 160 Meters only.

GALAPAGOS
PETER I ISLAND

Expedition for CQ Contest end of Oct
Possible December by JF1IST; I300

CONTRIBUTORS

K1MEM, K1ABU, K1KTB, DK1RV, K4BAI, N4KG, K3RR, K8GG,
AE1H, K6IR, WD5AAM, W8CT, W4VQ, W4ZFE, N2KK/6, K0CVD,
KD7SO, K1XN, K1XM, K21Z, VE3XN, W1WY, W3EVW, W3FU,
K1VHS, SM5DQC.

THE W6GO/K6HHD LIST

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U.S.A.

The W6GO/K6HHD List is a computer
listing of over 5,000 DX operators and
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